

10 Most Influential Studies from 2014



Just as 2015 kicks off we want to equip you with the best and latest information about the role of plant science in sustainable agriculture. So we have come up with the 10 most influential studies published over the last 12 months. Take a look to make sure you didn't miss any...

1. Technologies to Tackle Food Security in 2050

The International Food Policy Research Institute published a groundbreaking study in February which pinpointed the agricultural technologies that can reduce food insecurity in 2050, taking into account the anticipated impact of climate change. Crop protection products and plants with genetic traits, such as heat and drought tolerance, were shown to have significant potential to meet the challenge. [Learn more.](#)

2. Australia Reports No Neonicotinoid Impact on Bees

In February the Australian Government published a positive report on bee health. The report found that the introduction of neonicotinoids had led to “an overall reduction in the risks to the agricultural environment from the application of insecticides,” adding that Australian honeybee populations were not in decline despite the increased use of neonicotinoids. [Learn more.](#)

3. Crop Protection Key to Long-Term Productivity

In November a panel of influential authors from The Council for Agricultural Science and Technology produced a paper that concluded crop protection products must play a key role in supporting long-term global food production in both developed and developing countries. [Learn more.](#)

4. Intellectual Property Rights Bring Huge Benefits to Society

Eighty percent of economic benefits from an agricultural innovation that are protected by intellectual property can go to farmers and consumers, a report found in November. The report analyzes Ogura, an oilseed rape hybridization technology developed by the French National Research Institute. It found the technology created €1.2 billion in total economic benefits to society over its 20 year patent life. [Learn more.](#)

5. Planting the Four Billionth Acre of Biotech Crops

On May 3, 2014, Truth About Trade and Technology reported that the four billionth acre of biotech crop had been planted. [Learn more.](#)

6. University Warns of Increased Global Threat from Crop Pests

Many of the world's most important crop-producing countries will be fully saturated with pests by the middle of the century if current trends continue, according to academics at the University of Exeter. They published the results of their study in August. [Learn more.](#)

7. Credibility of Anti-Neonic Scientists Questioned

Research blaming pesticides for the decline in honeybees was called into question by a leaked memo in December. It suggested scientists had decided in advance to seek evidence supporting a ban on the chemicals. The memo says that the scientists agreed to select authors to produce four papers and coordinate their publication to "obtain the necessary policy change, to have these pesticides banned." [Learn more.](#)

8. Global Adoption of Biotech Grows with Smallholder Farmers Leading the Way

More than 18 million farmers planted biotech crops on 175 million hectares in 2013, according to the annual biotech report published by the International Service for the Acquisition of Agri-biotech Applications (ISAAA) in February. Of the farmers planting biotech crops, more than 90 percent, or 16.5 million, were small-scale and resource-poor farmers. [Learn more.](#)

9. Devastating Impact of Neonicotinoid Ban in UK

Around 18,000 hectares of winter oilseed rape crops were lost due to damage from cabbage stem flea beetle that would normally be controlled through neonicotinoid seed treatments, according to data released by the UK Agriculture and Horticulture Development Board in September. It is the first autumn without neonicotinoid seed treatments. [Learn more.](#)

10. Meta-analysis Discovers Better Harvests and Higher Incomes Among Biotech Farmers

On average, plant biotechnology adoption has increased crop yields by 22 percent and increased farmer profits by 68 percent, according to a metadata analysis published in November. The data found yield and profit gains to be higher in developing countries than in developed countries. [Learn more.](#)